

CLAIMS

1. Catalyst comprising at least one matrix and at least one hydro-dehydrogenating element chosen from the group formed by the elements of Group VIII and Group VIIB, said catalyst being characterized in that it contains at least one zeolite chosen from the group formed by the zeolites ZBM-30, ZSM-48, EU-2, EU-11 and at least one Y zeolite.
2. Catalyst according to claim 1 in which the zeolite is a ZBM-30 zeolite.
3. Catalyst according to claim 2 in which the ZMB-30 zeolite is synthesized in the presence of triethylenetetramine.
4. Catalyst according to one of claims 1 to 3 in which the Y zeolite is partially amorphous.
5. Catalyst according to one of claims 1 to 4 which contains at least one amorphous or poorly crystallized oxide-type porous mineral matrix.
- 20 6. Catalyst according to one of claims 1 to 5 which contains at least one doping element chosen from the group formed by boron, silicon and phosphorus.
7. Catalyst according to one of claims 1 to 6 which contains at least one element of Group VIIA.
- 25 8. Catalyst according to one of claims 1 to 7 which contains at least one element of Group VIIB.
9. Catalyst according to one of claims 1 to 8 which contains in % by weight relative to the total mass of the catalyst:
 - 0.1 to 60% of at least one hydro-dehydrogenating metal chosen from the group formed by the metals of Group VIIB and Group VIII,
 - 1 to 99% of at least one amorphous or poorly crystallized oxide-type porous mineral matrix,

- 0.1 to 99% of at least one zeolite chosen from the group formed by the zeolites ZBM-30, ZSM-48, EU-2 and EU-11,
 - 0 to 20% of at least one promoter element chosen from the group formed by silicon, boron and phosphorus,
- 5 - 0 to 20% of at least one element chosen from Group VIIA,
- 0 to 20% of at least one element chosen from Group VIIB,
- 0.1 to 40% by weight of a Y zeolite.
10. 10. Process for hydroconversion/hydrocracking of hydrocarbon charges using the catalyst according to one of claims 1 to 9.
11. 11. Hydroconversion/hydrocracking process according to claim 10 carried out in one stage.
- 15 12. 12. Hydroconversion/hydrocracking process according to claim 10 carried out in two stages.
13. 13. Hydroconversion/hydrocracking process according to one of claims 11 or 12 carried out under conditions of pressure greater than 5 MPa and leading to a conversion greater than 55%.
- 20 14. 14. Hydroconversion/hydrocracking process according to one of claims 11 or 12 carried out under conditions of pressure comprised between 2 and 12 MPa and leading to a conversion less than 55%.
- 25 15. 15. Hydroconversion/hydrocracking process according to one of claims 10 to 14 in which the charges used are gasolines, kerosines, gasoils, vacuum gasoils, long residues, vacuum residues, atmospheric distillates, heavy fuels, oils, waxes and paraffins, used oils, deasphalted residues or crudes, charges resulting from thermal or catalytic conversion processes and their mixtures.
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